

A Subsidiary of Arch Western Bituminous Group, LLC.

March 21, 2011

Permit Supervisor
Utah Coal Regulatory Program
Utah Division of Oil, Gas and Mining
1594 West North Temple, Suite 1210
P. O. Box 145801
Salt Lake City, Utah 84114-5801

Re: Construction of West Lease Portals, Canyon Fuel Company, LLC, SUFCO Mine C/041/002

Dear Permit Supervisor:

The enclosed four redline copies of the West Lease Portals Amendment (Task No. 3739) are being submitted to address deficiencies identified in the original submittal to construct two new concrete tunnels to access the West Lease Area of the mine. Attached are DOGM forms C-1 and C-2, page 5-vii, MRP Table 5-4 "Description of Existing Structures" pages 5-44, 5-45 and 5-46, updated bond calculation sheets, and a construction drawings that shows the proposed locations and details of construction activities. All activities will occur within our current disturbed area boundary at the minesite.

Sufco is in the process of expanding mining operations into the West Lease Area. In order to access the area Sufco permitted three new portals in 2010 (Task ID #3548). Portals 1 and 3 (numbering from West to East) where opened in late 2010. The determination was made that the grade coming out of two of these portals (1 and 2) would be too steep to allow access to the West Lease area from the upper yard area at Sufco's minesite. In order to access the new mining area Sufco wants to permit and construct two concrete tunnels under the upper yard and opening in the current concrete coal storage area of the lower yard.

A complete narrative description of construction and bonding activities pertaining to this submittal has been included as Appendix 5-10 in the MRP.

Fill that is removed for the installation of the tunnels will be stored on site during construction. Once construction is complete any material not used for back fill will be sampled for suitability according to the Division's standards and if found suitable will be placed at the subsoil stock pile at the waste rock site for use in final reclamation at the minesite. A paragraph detailing the quantity of subsoil placed at the storage pile will be added to chapter 2 of the MRP when determined and submitted with the "as builts". If the material does not meet the suitability requirements it will be disposed of in the waste rock site.

Updated and stamped version of Plates 5-2A, 5-2B, and 7-6 will be submitted once construction activities are completed.

MAR 2 2 2011

DIV. OF OIL, GAS & MINING

1041/002 Incoming

Salina, UT 84654 (435) 286-4400 - Office

(435) 286-4499- Fax

Ken May, General Manager 597 South SR 24 Permit Supervisor Utah Coal Regulatory Program March 15, 2011 Page 2

Sufco would like approval of this amendment as soon as possible to start construction by April 1st of this year. If you have any questions or need additional information, please contact Leland Roberts at (435) 286-4483.

Sincerely,

CANYON FUEL COMPANY, LLC

**SUFCO Mine** 

Kenneth E. May

General Manager

Encl.

KEM/FLR:kb

cc:

DOGM Price Field Office DOGM Correspondence File

#### APPLICATION FOR COAL PERMIT PROCESSING

Permit Change ⊠ New Permit □ Renewal □ Exploration □	Bond Release Transfer T
Permittee: CANYON FUEL COMPANY, LLC	
Mine: SUFCO MINE	Permit Number: C/041/002
Title: Concrete Tunnels to access the West Lease Area at main m	
Description, Include reason for application and timing required to implement:	
Two concrete tunnels at the mine site factilies in East Spring C	Canyon. Construction to begin March of 2011
Instructions: If you answer yes to any of the first eight (gray) questions, t	his application may require Public Notice publication.
Yes ⋈ No  1. Change in the size of the Permit Area? Acres:  2. Is the application submitted as a result of a Division O  Yes ⋈ No  3. Does the application include operations outside a prev  Yes ⋈ No  4. Does the application include operations in hydrologic  Yes ⋈ No  5. Does the application result from cancellation, reduction  Yes ⋈ No  6. Does the application require or include public notice p  Yes ⋈ No  Yes ⋈ No  8. Is proposed activity within 100 feet of a public road or  Yes ⋈ No  9. Is the application submitted as a result of a Violation?  Yes ⋈ No  10. Is the application submitted as a result of other laws on  Explain:	rider? DO# iously identified Cumulative Hydrologic Impact Area? basins other than as currently approved? in or increase of insurance or reclamation bond? publication? introl, right-of-entry, or compliance information? increase of an occupied dwelling?  NOV # ir regulations or policies?
Yes No 11. Does the application affect the surface landowner or compared to the surface landowner or include construction, not surface landowner or include subsiderion model to the surface landowner or include subsider	design or mine sequence and timing? (Modification of reporting of any baseline information? egetation outside the current disturbed area? storage or placement? nitoring, removal or revegetation activities? nodification, or removal of surface facilities? sing, sediment or drainage control measures? ns, maps or calculation? ntrol or monitoring?  am buffer zone or discharges to a stream? encies or permits issued to other entities?
Please attach four (4) review copies of the application. If the mine is on (5) copies, thank you. (These numbers include a copy for the Price Field Office)	or adjacent to Forest Service land please submit five
I hereby certify that I am a responsible official of the applicant and that the information contain	
and belief in all respects with the laws of Utah in reference to commitments, undertakings, and	obligations, herein.
KENNETH E. MAY, MINE MANAGER	Sunt Mes 3/21/11
	Name, Position, Date
Subscribed and sworn to before me this 21 day of March, 2011	NOTATIVE
Notary Public  My commission Expires:	NOTARY PUBLIC KRYSTAL RICKENBACH 580808 My Commission Expires November 10, 2013
Attest: State of} } ss:	STATE OF UTAH
For Office Use Only:	Assigned Tracking Received by Oil, Gas & Mining
	Number:
	RECEIVED
	MAR 2 2 2011
	DIV. OF OIL, GAS & MINING
	Marine

# APPLICATION FOR COAL PERMIT PROCESSING Detailed Schedule Of Changes to the Mining And Reclamation Plan

	ee: CANYON	N FUEL COM	IPANY, LLC Permit I	Number: C/041/002
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_			Replace Bond Calculation pages: Total2068 page 1, DEN	102006 page 1, in Appendix 5 5 in
Add	Replace	Remove	Volume 6 of MRP.  Replace Bond Calculation page: DEMO2068 Covered St	orage, in Appendix 5-9 in Volume
☐ Add		Remove	6 of MDD	
	Z	_	Replace Bond Calculation page: DEMO2068 Drainage C	culverts, in Appendix 5-9 in Volume
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#### LIST OF APPENDICES

(Appendices appear in Volume 6)

5-5	Experimental Coal Mining Program Approval
5-6	Leach Field Permit
5 <b>-</b> 7	Slope Stability Analysis
5-8	Access Road Stability Evaluation - Dames & Moore, 1981
5-9	Reclamation Bond Estimate
5-10	West Lease Portals Construction and Bonding Details

**TABLE 5-4**Description of Existing Structures

Structure	Construction Date	Construction Materials
Ambulance Garage	Summer 2007	Pre-Engineered Steel
Belt Deicer Tank	Fall 1994	Steel
Bulk & Used Oil Storage	Fall 1977 / Fall 2004	Steel & Concrete
Cap Magazine	Summer 1982	Steel & Wood
Chlorinator Building	Summer 1979	Steel
Covered Storage	Summer 1979	Concrete Block
Diesel Tank	Fall 1996	Steel & Concrete
Drainage Culverts	<b>Summer 1976</b> , Summer 2011	Steel
Electrical Building	Summer 1977	Concrete Block
Fan	Winter 1980	Structural Steel
Fire Water Tank - 300,000	Spring 2002	Steel & Concrete
Fuel Dock	Summer 1976	Concrete
Guard House	Summer 1977	Wood
Load-Out Belt	Summer 1975	Structural Steel
Lower Stacker Coal Storage	Summer 1975	Structural Steel
Lump Coal Belt	Fall 2010	Structural Steel
Lump Coal Storage	<del>Fall 1981,</del> <b>Fall 1982</b>	Concrete
No. 1 Belt	Fall 1977	Structural Steel
Office Building	September 1973 / 1990 / 2006	Pre-Engineered Steel
Powder Magazine	Summer 1982	Steel and Wood
<del>Pulley Racks</del>	Summer 1991	Steel
Pump Houses	Summer 1967 and 1975	Wood Frame & Metal
Rock Dust Bin	Fall 1976, Summer 1982	Structural Steel

### TABLE 5-4 (Continued)

#### **Description of Existing Structures**

Structure	Construction Date	Construction Materials
ROM Coal Storage	Winter 1988	Struct. Steel/Concrete
ROM MCC Building	Winter 1988	Concrete Block
Sampler Building	Fall 2003	Structural Steel
Sand & Salt Storage	<del>Fall 2010</del> Fall 1981	Concrete
Seal Portals		Concrete
Sediment Trap	Summer 1979	Concrete
Septic Tanks	Summer 1976 / Summer 2006	Steel / Concrete
Shelves	Summer 1990	Steel
Shop Garage	Summer 1989	Pre-Engineered Steel
Shop Office	Summer 1977	Wood
Side Release Tank	Fall 1997	Steel
Steam Cleaner Building	Fall 1981	Concrete
Stoker Belt	Fall 1977	Structural Steel
Stoker Bin	Fall 1977	Structural Steel
Stoker Coal Storage	Fall 1982 Summer 2011	Concrete
Stoker Oil Tanks	Fall 1977 / Fall 2004	Steel & Concrete
Storage Trailers	1975	Wood & Aluminum
Substation - Lower	Fall 1991 / Fall 2006 -2007	Steel /Concrete / Binwall
Ticket Printers	Summer 1996	Steel
Tipple Building	Fall 1977 / Mod. Fall 2008	Structural Steel & Concrete
Tipple MCC Building	Summer 2005	Concrete Block
Tipple Office Building	Fall 1977	Concrete Block

#### TABLE 5-4 (Continued)

#### **Description of Existing Structures**

Structure	Construction Date	Construction Materials
Transfer Building	Fall 1977	Structural Steel
Trash Pit	Fall 2009	Concrete
Truck Loader Bin	Fall 2002	Structural Steel
Truck Scale	1975 / 1982 / 1996	Structural Steel
Warehouse and Shop	Summer 1976	Pre-Engineered Steel
Water Tanks - Lower	Summer 1975/Summer 2002	Steel & Plastic
Water Tank - Upper	Summer 1975	Steel
West Lease Portals	Summer 2011	Concrete
Link Canyon Facilities		
Link Canyon Portals	Spring 2003	Steel
Link Canyon Substation	Summer 2000	Steel Skid
Four East Facilities		
Fan Generator Building	Fall 2003	Pre-Engineered Steel
4 East Fan	Spring 1996	Structural Steel

#### **Bonding Calculations**

#### **Direct Costs**

Subtotal Demolition and Removal Subtotal Backfilling and Grading Subtotal Revegetation Direct Costs	\$1,118,915.00 \$548,005.00 \$171,967.00 \$1,838,887.00	
Indirect Costs Mob/Demob Contingency Engineering Redesign Main Office Expense Project Mainagement Fee Subtotal Indirect Costs	\$183,889.00 \$91,944.00 \$45,972.00 \$125,044.00 \$45,972.00 \$492,821.00	10.0% 5.0% 2.5% 6.8% 2.5% 26.8%
Total Cost	\$2,331,708.00	
Escalation factor Number of years Escalation	\$37,532.00	0.004 4
Reclamation Cost Escalated	\$2,369,240.00	
Bond Amount (rounded to nearest \$1,000) 2009 Dollars	\$2,369,000.00	
Posted Bond	\$2,874,000.00	
Difference Between Cost Estimate and Bond Percent Difference	\$505,000.00 17.57%	

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<sup>\*</sup> Covered Storage Building was removed in 2011

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<sup>\*</sup> Pulley Rack was removed in 2011

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Revised February 2011

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## Appendix 5-10

West Lease Portals Construction and Bonding Details

This document is a narrative of the construction and bonding activates along with construction drawings for the West Lease Portals permit modification.

The following will be used for naming the portals in the rest of the document. Portal 1 and the first concrete tunnel is the West Lease Beltline (WLB), Portal 2 and the second concrete tunnel is the West Lease Main Haulage (WLMH) and Portal 3 is the West Lease Secondary Haulage (WLSH).

The construction drawing was created using Plate 5-2A, Detail of East Spring Canyon Surface Facilities and that plate can be used for reference.

The construction will occur in the following being removed from the Sufco minesite: The covered storage building, 3 shelves and the storage trailer in the upper yard, the concrete stoker coal storage bins and a drop inlet for the 10" mine yard drain system above the concrete stoker coal storage bins.

Two concrete tunnels will be constructed from the lower mine yard under the upper yard and into the West Lease area. The WLB is the west tunnel and is approximately 280 feet in length. The WLMH is the east tunnel and is approximately 300 feet in length. Once constructed they will allow access to the mine and retain the upper yard at the minesite. The WLMH will also have a concrete vent shaft extending approximately 10 feet to the surface at its east end to allow for addition ventilation of the mine. Details of the tunnels and vent shaft are on the construction drawing being submitted. No shaft will remain on site after final reclamation since the shaft location is in fill that will be removed during reclamation. The portals will be sealed according to the approved MRP.

The current stoker coal storage bins act as the retaining wall between the upper and lower yards. A new retaining wall will be constructed surrounding the portals for the beltline and main haulage way. This wall will support the upper yard and the road leading to the upper yard/shop area. The area above the new portals will be sloped to allow yard drainage to flow over the surface to the sediment trap in lieu of the drop inlet that will be removed. Details of the retaining wall have been included on the construction drawing.

Bonding calculations for the tunnels, vent shaft and retaining wall have been combined into a new bond sheet named West Lease Tunnels. It has been included in this submittal.

Since the new portals will result in the loss of three concrete storage bins a new bin will be built adjacent to the current sand and salt bin. It will be the same size as the two bins adjacent to it. The current sand and salt bin will also be used for coal storage. A coal bin to the west of the Stoker Bin will be used for sand and salt storage in the winter. Locations of the bins can be found on the construction drawing and a detail drawing of the new bin has been included.

The location and depth of the concrete tunnels will result in the replacement of the 42" undisturbed bypass culvert that drains Mud Spring Hollow into the 72" undisturbed culvert draining East Spring Canyon under the mine yard. The 42" culvert will run parallel to the WLB tunnel and reconnect to the 72" bypass culvert via a concrete junction box in the lower mine yard. Approximately 500 feet of the 72" culvert will also be replaced at this time and moved so that it does not run beneath any structures. A junction box will be placed on each

end of the pipe to connect the new sections of culvert with the existing ones. The new culvert will run parallel to the WLMH tunnel and reconnect with the existing culvert in a junction box at the same location as the new 42" culvert. Approximately 445 feet of culvert will be used for the Mud Spring Hollow culvert and approximately 480 feet of 72" culvert will be used for the East Spring Canyon culvert. Six concrete junction boxes will be used. Bonding calculations have been updated accordingly. Locations of the culverts can be found on the construction drawing along with details for the junction boxes.

The following bond calculation pages have been updated with this submittal:

Total2068 page 1

Demo2068 page 1

Demo2068 Covered Storage page 10

Demo2068 Drainage Culverts page 12

Demo2068 Lump Coal Storage page 20

Demo2068 Pulley Racks page 25

Demo2068 Sand and Salt Storage page 32

Demo2068 Shelves page 36

Demo2068 Stoker Coal Storage page 44

The following bond calculation page was added with this submittal: Demo2068 West Lease Tunnels page 64

#### **Concrete Quantities**

ltem	Area (ft^2)	Length (ft)	Volume (ft^3)	Volume (c.y.)
West Box Culvert	78.22	280	21902	811.2
East Box Culvert	78.22	300	23467	869.1
Vent Shaft Support Walls	44.32	10.33	458	17.0
Vent Shaft Support Floor	271.72	1.17	318	11.8
Gear Base	350.00	10	3500	129.6
Retaining Wall	33.96	176	5977	221.4
Slab	3741.00	0.67	2506	92.8

#### **Pipe Quantities**

ltem	Length (ft)
72" Dia Pipe	478.73
42" Dia Pipe	445.14

**New Junction Boxes** 

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